## AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Atty. Dkt.: 4147-173

Art Unit: 2617

Claims 1-35 (Cancelled)

36. (Currently Amended) A method of selecting an access network from among one or more access networks capable of providing service to a mobile communication stationterminal, the method comprising:

determining, in said terminal, for each access selection a radio quality from the terminal to each access network,

determining, in said terminal, for each access selection and for each access network, a utilization factor for at least one node,

determining, <u>in said terminal</u>, for each access selection and for each access network, a user perceived data quality, based on said determined utilization factor and said determined radio quality for the access network, and

selecting, in said terminal, at least one of said access networks, based on the determined user perceived quality.

37. (Previously Presented) The method according to claim 36, further comprising: estimating a radio link bitrate  $\mu$  for each access, based on the determined radio quality q, and

determining the user perceived data quality, based on the determined utilization factor and the estimated radio link bitrate.

38. (Previously Presented) The method according to claim 37, further comprising estimating the radio link bitrate according to:

 $\mu = g(q)$ 

where g is an access specific function.

- 39. (Currently Amended) The method according to claim 38, wherein the radio link quality q is represented by at least any one of pilot signal strength, beacon signal strength,  $E_c/N_0$ , SIR, C/I, bit error rate, block error rate, and packet error rate.[[.]]
- 40. (Previously Presented) The method according to claim 37, further comprising determining the user perceived quality  $Q_u$  according to:

$$Q_u = \mu * f(\rho)$$

where  $\mu$  represents the radio link bitrate, and  $\rho$  represents the utilization factor for the access.

41. (Previously Presented) The method according to claim 37, further comprising determining the user perceived quality according to:

$$Q_u = \mu^*(1-\rho)$$

where  $\mu$  represents the radio link bitrate, and  $\rho$  represents the utilization factor for the access.

- 42. (Previously Presented) The method according to claim 37, wherein  $\mu$  is constant.
- 43. (Previously Presented) The method according to claim 40, wherein  $\rho$  is constant.
- 44. (Previously Presented) The method according to claim 40, wherein the function  $f(\rho)$  is specific for each type of access network.
- 45. (Previously Presented) The method according to claim 36, further comprising representing said user perceived quality with a data bit rate for the access network.
- 46. (Previously Presented) The method according to claim 36, further comprising representing said user perceived quality with an active session data throughput for the access network.

•

SIMONSSON, et al. Serial No. 10/583,261

Atty. Dkt.: 4147-173 Art Unit: 2617

- 47. (Previously Presented) The method according to claim 45, wherein said data bitrate comprises an estimated Session Circuit Switched Equivalent (CSE) bitrate.
- 48. (Previously Presented) The method according to claim 40, wherein  $\rho$  is estimated by the expression:

$$\rho = 1 - \frac{P_{CCH}}{P_{TOT}},$$

where  $P_{CHH}$  is the common power, and  $P_{TOT}$  is the total power.

- 49. (Previously Presented) The method according to claim 48, wherein  $P_{CHH}$  is estimated from the received pilot power and a factor  $F_{CCH}$  that compensates for the other common channels, and  $P_{TOT}$  is estimated from a received wideband signal strength.
- 50. (Previously Presented) The method according to claim 49, further comprising determining the utilization by measuring at least a received pilot power SS<sub>pilot</sub> and a total power  $SS_{out}$  from a received wideband signal strength, whereby the utilization as represented by  $\rho$  is estimated.
- 51. (Previously Presented) The method according to claim 36, further comprising selecting the at least one access network before the terminal is connected to an access network.
- 52. (Previously Presented) The method according to claim 36, wherein said access networks utilize the same type of radio access technology.
- 53. (Previously Presented) The method according to claim 36, wherein said access networks utilize different types of radio access technologies.

SIMONSSON, et al. Atty. Dkt.: 4147-173 Serial No. 10/583,261 Art Unit: 2617

54. (Previously Presented) The method according to claim 36, wherein said access networks belong to the same network.

- 55. (Previously Presented) The method according to claim 36, wherein said access networks belong to different networks.
- 56. (Previously Presented) The method according to claim 36, wherein said access networks belong to the same operator.
- 57. (Previously Presented) The method according to claim 36, wherein said access networks belong to different operators.
- 58. (Previously Presented) The method according to claim 36, wherein the one or more accesses include at least one of WCDMA, CDMA2000, GSM, WLAN or GPRS.
- 59. (Previously Presented) The method according to claim 36, wherein said node comprises at least one of an access point, and base station.
- 60. (Currently Amended) A system enabling selection of an access network from among one or more access networks capable of providing service to a mobile communication station terminal, the system comprising:

means for determining for each access selection a radio quality from the terminal to each access network,

means for determining, for each access selection and for each access network, a utilization factor for at least one access point,

means for determining, for each access selection and for each access network, a user perceived data quality, based on said determined utilization factor and said determined radio quality for the access network, and

erial No. 10/583,261 Art Unit: 2617

Atty. Dkt.: 4147-173

means for selecting at least one of said access networks, based on the determined user perceived quality.

61. (Previously Presented) The system according to claim 60, wherein said determining means further comprise means configured to estimate a radio link bitrate  $\mu$  for each access, based on the determined radio quality q, and

said determining means are further configured to determine the user perceived data quality, based on the determined utilization factor and the estimated radio link bitrate.

62. (Previously Presented) The system according to claim 61, wherein said estimating means are configured to estimate the radio link bitrate according to:

$$\mu = g(q)$$

where g is an access specific function.

63. (Previously Presented) The system according to claim 60, wherein said user perceived data quality determining means are configured to determine the user perceived quality according to:

$$\mu * f(\rho)$$

64. (Previously Presented) The system according to claim 60, wherein said user perceived data quality determining means are configured to determine the user perceived quality according to:

$$\mu^*(1-\rho)$$

65. (Previously Presented) The system according to claim 63, wherein said utilization determining means are configured to estimate  $\rho$  according to:

$$\rho = 1 - \frac{P_{CCH}}{P_{TOT}},$$

where  $P_{CHH}$  is the common power, and  $P_{TOT}$  is the total power.

66. (Previously Presented) The system according to claim 65, wherein  $P_{CHH}$  is estimated from the received pilot power and a factor  $F_{CCH}$  that compensates for the other common channels, and  $P_{TOT}$  is estimated from the received wideband signal strength.

- 67. (Previously Presented) The system according to claim 66, wherein the utilization is determined by measuring at least a received pilot power  $SS_{pilot}$  and a total power  $SS_{out}$  from a received wideband signal strength, whereby the utilization as represented by  $\rho$  is estimated.
- 68. (Previously Presented) The system according to claim 61, wherein said radio quality determining means are further configured to estimate  $\mu$  based on at least one of pilot signal strength, beacon signal strength, E<sub>b</sub>/N<sub>0</sub>, SIR, and C/I.
- 69. (Previously Presented) The system according to claim 60, wherein said node comprises at least one of an access point, and base station.
- 70. (Currently Amended) A mobile communication station terminal capable of receiving service from one or more access networks, comprising:

means for determining for each access selection a radio quality from the terminal to each access network,

means for determining, for each access selection and for each access network, a utilization factor for at least one node,

means for determining for each access selection and for each access network, a user perceived data quality, based on a utilization factor for the access network, and

means for selecting at least one of said access networks, based on the determined user perceived quality and the radio quality.

SIMONSSON, et al. Atty. Dkt.: 4147-173 Serial No. 10/583,261

71. (Currently Amended) A system enabling selection of an access network from among one or more access networks capable of providing service to a mobile communication stationterminal, the system comprising:

Art Unit: 2617

a first unit configured to determine for each access selection a radio quality from the terminal to each access network,

a second unit configured to determine, for each access selection and for each access network, a utilization factor for at least one access point,

a third unit configured to determine, for each access selection and for each access network, a user perceived data quality, based on said determined utilization factor and said determined radio quality for the access network, and

a selector unit configured to select at least one of said access networks, based on the determined user perceived quality.